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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,773	10/24/2003	John Chen	15436.247.8.1	1968

22913 7590 12/13/2007
WORKMAN NYDEGGER
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER

AKANBI, ISIAKA O

ART UNIT	PAPER NUMBER
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2886

MAIL DATE	DELIVERY MODE
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12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,773

Applicant(s)

CHEN ET AL.

Examiner

Isiaka O. Akanbi

Art Unit

2886

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 November 2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-13, 15, 18-20 and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,666,450) in view of Tan (5,029,965) or Chaoul et al. (H551).

Regarding to claims 1, 3, 12-13 and 18-20, Fujimura teaches of an apparatus/method for measuring a concentricity of optical components in an optical assembly comprising a header (3/110) with a photonic device mounted thereon, said photonic device having a first optical axis (laser axis), said optical assembly further comprising a cap (5/85/115) having a lens (6/114) therein, said lens having a second optical axis (lens axis),

a chuck (23) (a device that engages the bottom and/or sides of base plate/header)(i.e. a device for centering and clamping work in a lathe or other machine tool (dictionary.com) or a tube to which a lens is fasten for centering (photonics.com)) configured to support lead pins

(4/81/82) of said optical assembly (col. 1, lines 58-63)(fig. 1), said chuck being adapted to support said optical assembly without obstructing a view of at least a portion of said lens (6)(figs. 1 and 2)(figs. 15-18) and a camera (col. 8, line 55-65).

said chuck being exterior of said optical assembly (1/3/5/6) and said optical assembly being placed on top of at least a portion of said chuck (fig. 1: 23); and

Fujimura is silent regarding a visual display system.

However, the use of visual display system (i.e. screen/graph) adapted to depict a position/coordinate (i.e. x and y coordinate) is known in the art, as evidenced by Tan (figs. 1, 5-8: 20)(col. 3, lines 4-col. 4, line), as well as Chaoul et al. (H551)(col. 2, lines 68-col. 3, line 14)

Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to provide a visual display (screen/graph) system adapted to depict a position (i.e. x and y coordinate) of said lens relative to said photonic device and to measure said position for the purpose of providing easy view of the alignment.

As to claim 2, Fujimura further discloses measurement is used to determine said concentricity (maximum power) between said first optical axis (laser/lens axis) and said second optical axis (laser/lens axis)(figs. 1 and 2)(See abstract)(col. 2, line 33-42).

As to claim 4, Fujimura also discloses a chuck (figs. 1, 16) that includes a recess (figs. 1 and 16: 4, 111) configured to receive the header (fig. 16: 110) of the optical assembly (fig. 16: 110/113/114/115).

As to claims 7 and 24, Fujimura also discloses wherein said lens is a ball lens (6) and said photonic device is a laser (16).

As to claims 8-9 and 25-26, Fujimura further discloses wherein said first optical axis is collinear with a beam emitted from said laser (16) and said second optical axis passes through a center of said ball lens (figs. 1 and 2)(col. 2, line 33-42).

As to claim 15, Fujimura also discloses wherein said component is a laser having a first axis and said base is a header having a second axis parallel to said first axis, and wherein the step for measuring measures the distance between said first axis and said second axis (figs. 16 and 17)(col. 17, line 40-col. 18, line 1-56)(col. 7, line 56-67).

As to claims 10-11 and 27-28, Fujimura further discloses in another embodiment (fig. 10) wherein said optical assembly (fig. 16: 110/113/114/115) is held in an arm (96) and a movable chuck (col. 14, line 11-38)(fig. 10).

Fujimura when modified by Tan fail to specifically specify that the chuck is movable relative to said visual display system, because there is no reason for the chuck and the visual display system to be fixed, since they are independent of each other.

Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to provide a chuck that is movable relative to said visual display system for the purpose of providing accurate alignment between laser and the light receiving surface.

As to claims 29-30, Fujimura also discloses a passive method for measuring a concentricity of optical components in an optical assembly (fig. 16)(See abstract)(col. 1, line 14-16).

Claims 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura et al. (5,963,696) in view of Tan et al. (H315) or Chaoul et al. (H551) and further in view of Mazumder et al. (5,446,549).

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As to claims 14 and 21, the reference of Fujimura and Tan teaches of an optical assembly comprising camera (CCD), as applied to claims above, however the reference of Fujimura and Tan or Chaoul is silent with regard to said camera further comprising a zoom lens.

However, the use of a camera with zoom lens is common and well known in the art, as evidenced by Mazumder et al. (fig. 2: 12)(col. 10, lines 34-41).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to provide a camera comprising a zoom lens for the purpose of zoom in or out camera to obtain a better image of the alignment.

Claims 5-6, 16-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimura in view of Tan or Chaoul and further in view of Staver et al. (5,621,831)

As to claims 5, 16 and 22, Fujimura when modify by Tan or Chaoul is silent regarding the limitation wherein said visual display system includes a video overlay including at least one calibration feature that allows said concentricity to be measured.

However Staver teaches of visual display system that includes a video overlay including at least one calibration feature that allows said concentricity to be measured (fig. 3)(col. 5, line 4-30). Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to provide visual display system includes a video overlay including at least one calibration feature that allows said concentricity to be measured for the purpose of aiding a person to align accurately.

As to claims 6, 17 and 23, Fujimura, as modified by Tan or Chaoul and Staver disclose the claimed invention, as applied to claim 5, 16 and 22 above, except calibration feature that allows said concentricity to be measured to within 1 micron.

However, it would have been obvious to one having ordinary skill in the art at the time of invention to design a calibration feature that would allow said concentricity to be measured to within certain micron/degree (i.e. 1 micron) for the purpose of providing/discovering the optimum or workable ranges for a more accurate measurement. (see *In re Aller*, 105 USPQ 233).

Additional Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed in the attached form PTO-892 teach other prior art apparatus/method for measuring a concentricity of optical components in an optical assembly that may anticipate or obviate the claims of the applicant's invention.

Response to Arguments

Applicant's arguments with respect to the rejection(s) of claim(s) 1-30 under 35 U.S.C. 103(a) have been fully considered but are not persuasive.

In response to Applicant's arguments that Fujimura does not teach or suggest a chuck as recited in amended claims 1, 4, 12, and 18, it is respectfully pointed out to applicant that this argument is not persuasive as Fujimura clearly discloses (col. 1, lines 57-col. 2, line 7) a chuck that includes a recesses to receive feedthroughs or other electrical pins of header as shown in (fig. 1 and 16: 4, 111) and thus meeting applicant's instant application chuck definition (par. 027) and limitations. Further applicant's instant application also discloses (par. 0004) that a chuck as recited in amended claims 1, 12, and 18, is known in the art. See fig. 1.

Finally, In response to Applicant's arguments with respect to claim rejections over Fujimura in view of Genco, it is respectfully pointed out to applicant that the arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

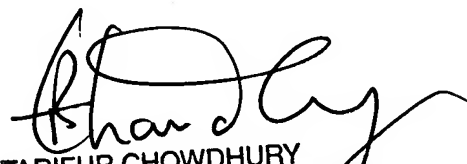
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isiaka Akanbi whose telephone number is (571) 272-8658. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on (571) 272-2287. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isiaka Akanbi

December 08, 2007


TARIFUR CHOWDHURY
SUPERVISORY PATENT EXAMINER